Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A process for the fabrication of an inertial sensor with failure threshold, comprising the steps of:

forming, on top of a substrate of a semiconductor wafer, at least one sample element embedded in a sacrificial region;

forming, on top of said sacrificial region, a body connected to said sample element; and

etching said sacrificial region, so as to free said body and said sample element.

2. (Original) The process according to claim 1, in which the step of forming said sample element comprises:

forming a first layer of a first material, which coats said substrate;

forming a second layer of a second material, which coats said first layer;

shaping said second layer, so as to define said sample element; and

forming a third layer of said first material coating said first layer and said sample element.

3. (Original) The process according to claim 2, in which said first material is a dielectric material and said second material is a conductive material.

4. (Original) The process according to claim 3, in which said first material is silicon dioxide and said second material is polysilicon.

5. (Original) The process according to claim 1 wherein the step of forming at least one sample element comprises the step of making at least one weakened region of said sample element.

6. (Original) The process according to claim 5, in which the step of making at least one weakened region comprises the step of defining a narrowing of said sample element.

7. (Original) The process according to claim 6 in which said step of defining a narrowing portion comprises forming notches in said sample element.

8. (Original) The process according to claim 5 in which the step of making at least one weakened region comprises making a groove extending between opposite edges of said sample element.

9. (Original) The process according to claim 8, in which the step of making a groove comprises performing an etch of controlled duration of said sample element .

10. (Original) The process according to claim 8 in which the step of making a groove comprises:

forming a stop layer inside said sample element; and

etching said sample element until said stop element is reached.

11. (Original) The process according to claim 1 wherein the step of forming at least one sample element comprises defining at least one anchoring pad of said sample element.

12. (Original) The process according to claim 11, in which the step of etching said sacrificial region is interrupted before removing residual portions of said sacrificial region underlying said anchoring pad.

13. (Original) The process according to claim 1, further comprising making, before performing the step of forming said body, at least one first opening through said sacrificial region , which exposes one end of said sample element, and making second openings, which expose respective portions of said substrate.

14. (Original) The process according to claim 13, in which the step of forming said body comprises:

growing an epitaxial layer, which extends on top of said sacrificial region and through said first opening and said second openings; and

etching said epitaxial layer until said sacrificial region is reached.

15. (Original) The process according to claim 14, in which, during the step of etching said epitaxial layer there are defined anchorages connected to said substrate and elastic elements connecting said body to said anchorages.

16. (Currently Amended) A method for manufacturing an inertial sensor, comprising:

forming, on a semiconductor substrate, a sample element having a first end coupled to the substrate, the sample element being configured to break under a preselected strain; and

forming, above the ~~semiconductor substrate~~sample element, a semiconductor material body coupled to a second end of the sample element.

17. (Original) The method of claim 16 wherein the sample element has a T shape, the first end forming a cross-bar portion of the T and being coupled to the substrate at extreme ends of the crossbar, the second end extending from a central portion of the crossbar to form the T.

18. (Original) The method of claim 16, further comprising forming an additional sample element having a first end coupled to the substrate, a second end coupled to the semiconductor material body, and configured to break under the preselected strain.

19. (Original) The method of claim 16, further comprising forming a weakened region on the sample element, and wherein the sample element is configured to break at the weakened region under the preselected strain.

20. (Original) The method of claim 19 wherein the weakened region comprises a narrowed region of the sample element.

21. (Currently Amended) A method of measuring movement of a device, comprising:

providing, in the device, a circuit configured to permanently change a conductive state of a conductive path in the event the device is subjected to an acceleration exceeding a preselected level the conductive path including a semiconductor structure having a weakened region;

applying a potential at first and second ends of the conductive path; and

detecting a change in the conductive state of the conductive path.

22. (Original) The method of claim 21 wherein the circuit is configured to break the conductive path.

23. (Original) The method of claim 21 wherein the device is a cellular phone.

24. (Original) The method of claim 21 wherein the preselected level corresponds to an acceleration caused by a drop of the device to an unyielding surface from a preselected height.

25. (Currently Amended) The method of claim 21 wherein the preselected level is selected to ~~be~~ correspond to an acceleration equal to or less than an acceleration sufficient to damage the device.

26. (Currently Amended) The method of claim 21, further comprising breaking ~~a~~ the semiconductor structure through which the conductive path passes in the event the device is subjected to the acceleration.

27. (Original) The method of claim 26 wherein the breaking step comprises moving a first semiconductor body relative to a second semiconductor body in response to inertial forces resulting from the acceleration, the semiconductor structure being coupled at a first end thereof to the first body and at a second end to the second body, the movement of the first body causing a flexion of the structure, resulting in the breaking thereof.

28. (Original) The method of claim 27 wherein the second semiconductor body is rigidly coupled to the device.

29. (New) The method of claim 16, further comprising forming a circuit on the semiconductor substrate, configured to subject the sample element to a voltage such as to cause an electric current to flow through the sample element.

30. (New) The method of claim 29 wherein the circuit is further configured to detect the current flowing in the sample element.

31. (New) A method of detecting excessive acceleration of a device, comprising:

placing a voltage potential across a conductive path in the device;

sensing a current in the conductive path;

indicating, if a current is sensed, that the device has not been subjected to an acceleration exceeding a selected threshold; and

indicating, if a current is not sensed, that the device has been subjected to an acceleration exceeding the selected threshold.

32. (New) The method of claim 31 wherein the conductive path is formed on a component of the device comprising a semiconductor material substrate.

33. (New) The method of claim 32 wherein the conductive path includes a sample element formed on the semiconductor material substrate, the sample element configured to break if subjected to an acceleration exceeding the selected threshold.